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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/346,412	07/01/1999	GREGORY A. JAMIESON	H16-25990	2387
128	7590	08/13/2004	EXAMINER	
HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			TRAN, MYLINH T	
			ART UNIT	PAPER NUMBER
			2179	

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/346,412	GREGORY JAMIESON	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mylinh T Tran	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on Request for recon filed 06/29/04
  
- 2a) This action is **FINAL**.                    2b) This action is non-final.
  
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,6-24,27 and 29-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 49-57 is/are allowed.
- 6) Claim(s) 1,6,9-24,29,33-48 and 58 is/are rejected.
- 7) Claim(s) 7, 8, 27 and 30-32 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                             |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|                                                                                                                        | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

Applicant's request for reconsideration filed on 06/29/04 has been carefully considered. However, arguments regarding rejections under 35.U.S.C 103 have not been found to be persuasive. Therefore, these claims 1, 6, 9-24, 29, 33-48 and 58 are rejected under the same ground of rejection as set forth in the Office Action mailed (02/10/04).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6, 9-10, 16, 24, 29, 33, 41, 43 and 58 rejected under 35 U.S.C. 102(b) as being anticipated by Harrow et al. [US. 5,375,199].

As to claims 1, 24 and 58, Harrow et al. discloses displaying a scale extending along a gauge axis (figure 11B), displaying one or more bars extending along the gauge axis (the slider ALARM is one bar), each bar representative of a set of high and low process limit values for a process variable (50, 32 represent high and low limit values), displaying a first bar extending along the gauge axis, wherein a first end of the first bar is representative of an engineering hard high limit for the process variable (figure 11B, 80 is the engineering hard high limit) and a second end of the

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first bar is representative of engineering hard low limit for the process variable (figure 11B, 0 is the engineering hard low limit), wherein the first end and second end of the first bar representative of the engineering hard high and hard low limits define a range in which operator set high and low limits are set (the bar "slider ALARM" is the range in which operator set high and low limits are set);

a second bar extending along the gauge axis (the bar "slider ALARM" is the second bar), wherein a first end of the second bar is representative of an operator set high limit for the process variable (value 50 is the first end of the bar represents for high limit); and a second end of the second bar is representative of an operator set low limit for the process variable (32 is the second end of the bar represent for low limit) wherein the first end and second end of the second bar representative of the operator set high and low limits define a range in which the process is free to operate (column 18, lines 13-40);

and the graphical shape displayed along the gauge axis representative of current value of the process variable (figure 11B).

As to claims 6 and 29, Harrow et al. teaches the second bar extending along the gauge axis representative of operator set high and low limits for the process variable extends along the gauge axis within the first bar representative of the engineering hard high and low limits for the process

variable (value limits 32 and 50 of second bar are displayed within value limits 0 and 80 of first bar).

As to claims 9 and 10, Harrow et al. also discloses the graphical user interface further includes user manipulation elements movable to change one or more of the high and low process limit values (column 18, lines 22-32).

As to claim 16, Harrow et al. shows the scale extending along the gauge axis is adjustable as a function of a current value of the process variable relative to the one or more process limits values (column 18, lines 12-40).

As to claim 33, Harrow et al. also demonstrates displaying user manipulation elements movable to change one or more of the high and low process limit values, moving such user manipulation elements to generate data representative of changed high or low process limit values; and providing such data to a controller of the process (figure 13A, 206, 208, column 2, lines 38-44, column 19, lines 1-10 and column 9, lines 24-46).

As to claim 41, Harrow shows rescaling the scale extending along the gauge axis as a function of the current value of the process variable relative to the set of high and low process limit values (figure 11B, user can rescale the scale of the gauge axis).

As to claim 43, Harrow et al. teaches determining the state of the current value of the process value relative to the set of high and low process limit values includes determining whether the current value of the process variable is within the set of high and low process limit values (figure 11B,

value limits 32 and 50 of second bar are displayed within value limits 0 and 80 of first bar ), and determining whether the current value of the process variable is within a certain percentage of a limit value of the set of high and low process limit values, and determining whether the current value of the process variable is a certain percentage outside of the set of high and low process limit values (column 18, line 43 through column 19, line 30).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-15, 17-19, 34-40, 42 and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrow and further in view of Schaefer et al. [US. 4,675,147].

As to claims 11, 12, 35, 36 and 37, the difference between Harrow and the claim are the user manipulation elements include one or more manipulation pointer flags associated with operator set limits, the one or more manipulation pointer flags are draggable along the gauge axis to change such operator set limits and the user manipulation elements include one or more manipulation pointer flags associated with the engineering hard limits, the one or more manipulation pointer flags are draggable along the gauge

axis to change such engineering hard limits. Schaefer et al. also shows these features at column 3, lines 50-65. Although Schaefer et al. also teaches the engineering hard high and low limits, it does not show the engineering high and low limits defining a range in which operator set high and low limits being set. It would have been obvious to one of ordinary skill in the art, having the teachings of Harrow and Schaefer et al. before them at the time the invention was made to modify the process variables taught by Harrow to include the pointer flags of Schaefer et al., in order to be able for user see the setting points clearly.

As to claims 13, 34, 38 and 40, Schaefer et al. demonstrates the graphical shape representative of the current value of the process variable that is a pointing device proximate to the scale (column 13, lines 46-67 and column 14, lines 1-35).

As to claim 14, Schaefer et al. teaches graphical user interface further includes at least one additional graphical shape displayed along the gauge axis representative of at least one additional value for the process variable (figure 5, column 16, lines 25-50)

As to claims 15, 17 and 39, Schaefer et al. also teaches the additional graphical shape representative of at least one additional value for the process variable that has a color of a set of colors that reflects the state of the current value for the process variable relative to the set of high and low process limit values (column 15, lines 20-32).

As to claim 18, Schaefer et al. also shows a color for the graphical shape represents one of a current value of the corresponding process variable being within the set of high and low process limit values, the current value of the corresponding process variable being within a certain percentage of a limit value of the set of high and low process limit values, and the current value of the corresponding process variable being outside of the set of high and low process limit values (column 15, lines 20-32).

As to claim 19, while Schaefer et al. discloses a background of a region adjacent the one or more bars along the gauge axis is of a color when the graphical shape representative of the current value of the process variable is outside of the high and low process limit values, Harrow et al. teaches the region being representative of engineering physical limits of the process variable; the user low and high limit values would be inside the engineering high and low limits; and the graphical shape representative of the current value of the process variable is outside of the high and low process limit values (figure 11B, 32 and 50 place inside 0 and 80).

As to claim 42, Schaefer et al. also shows displaying the graphical shape representative of the current value of the process variable includes: determining a state of the current value of the process value relative to the set of high and low process limit values and displaying the graphical shape in a color of a set of colors that reflects the state of the current value for the process variable (column 17, lines 4-49).

As to claim 44, while Schaefer et al. also teaches displaying a graphical element representative of engineering physical limits of the process variable, Harrow et al. shows determining whether the current value of the process variable is outside of the set of high and low process limit values and when the current value of the process variable is outside the set of high and low process limit values (figure 11B, column 18, lines 12-57).

As to claim 45, Schaefer et al. demonstrates displaying a graphical element representative of engineering physical limits of the process variable includes displaying a background region adjacent the one or more bars along the gauge axis in a particular color representative of engineering physical limits (column 9, lines 39-53).

Claims 20-23 and 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable Harrow et al. [US. 5,375,199] and further in view of van Weele et al. [US. 5,631,825].

As to claim 20, the difference between Harrow and the claim is a trend graph. van Weele et al. discloses the graphical user interface further includes a trend graph for the process variable (column 6, lines 30-35). It would have been obvious to one of ordinary skill in the art, having the teachings of Harrow et al., and van Weele et al. before them at the time the invention was made to modify the gauge axis, the graphical shape and operator set limit for the process variables as taught by and Harrow to include the trend graph of

van Weele et al. in order to provide data input means for selecting one of a set of preselected process primitives, and means for indicating a value for the selected process primitive and substituting the input value for that primitive as the value to be monitored and controlled by the PCC, as taught by van Weele et al.

As to claim 21, van Weele et al. also discloses the trend graph includes at least one of a historical trend graph and a prediction trend graph for displaying trend information representative of process variable values (column 14, lines 10-65).

As to claim 22, van Weele et al. teaches the trend graph includes at least one of a historical trend graph and a prediction trend graph for displaying trend information representative of process variable limits (figures 20-21, column 36, lines 35-52).

As to claim 23, while van Weele et al. teaches the manipulated and controller variables (column 35, lines 31-61), Harrow shows plurality of variables of a continuous multivariable process

As to claim 46, van Weele et al. also demonstrates displaying a trend graph for the process variable with the displayed scale, one or more bars, and the graphical shape representative of the current value of the process variable (column 14, lines 11-26).

As to claim 47, van Weele et al. discloses displaying the trend graph includes displaying at least one of a historical trend graph and a prediction trend

graph for the process variable representative of process variable values (column 14, lines 27-67).

As to claim 48, van Weele et al. also discloses displaying the trend graph includes displaying at least one of a historical trend graph and a prediction trend graph for the process variable representative of process variable limits (figures 20-21, column 14, lines 1-50).

***Response to Arguments***

Applicant's arguments with respect to claims 1, 6, 9-24, 29, 33-48 and 58 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

Claims 49-57 are allowable. The reason for the allowance is none of the references teach a delta soft high region within the first bar and adjacent the first end thereof and a delta soft low region within the first bar and adjacent the second end thereof, and further wherein the delta soft high region and the delta soft low region are representative of a delta optimization range within the operator set high and low limits. The method for providing real-time process information to a user with regard to a process is assumed to be default choice is patentable over relevant prior art made of record.

Claims 7, 8, 27 and 30-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

These claims would be allowable because the prior arts fails to teach or suggest a delta soft high region within the first bar adjacent the first end thereof and a delta soft low region within the first bar and adjacent the second end thereof, and the delta soft high region and the delta soft low region are representative of a delta optimization range within the operator set high and low limits.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***

Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231. If applicant desires fax a response, (703) 746-7238), may be used for formal After Final communications, (703)

746-7239 for Official communications, or (703) 746-7240 for Non-Official or draft communications. NOTE, A Request for Continuation (Rule 60 or 62) cannot be faxed.

Please label "PROPOSED" or "DRAFT" for information facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mylinh Tran whose telephone number is (703) 308-1304. The examiner can normally be reached on Monday-Thursday from 8.00AM to 6.30PM

If attempt to reach the examiner by telephone are unsuccessful, the examiner 's supervisor, Heather Herndon, can be reached on (703) 308-5186,

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Mylinh Tran

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BA HUYNH  
PRIMARY EXAMINER